EXAMINER'S AMENDMENT

1. This application remains assigned to Technology Center 1700: Art Unit 1797 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to **Art Unit 1797**.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview and FAX authorization from Charles Fallow on 28 MAR 2008.

4. The application has been amended as follows:

Amendments to the Title:

Replace the title with -- APPARATUS FOR CLEANING CONTAMINATED OIL --.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-19. (cancelled)

20. (currently amended) Apparatus for cleaning oil, said apparatus comprising:

an inlet connectable to a source of oil to be cleaned,

a holding tank for oil,

a heating unit for heating said oil,

a first pump connectable to said inlet or said holding tank for pumping oil to said heating unit,

a self powered centrifugal cleaner, said centrifugal cleaner having a rotor mounted for rotation about a rotation axis, a housing enclosing the rotor, a cleaner inlet connected to said heating unit for receiving oil from said heating unit and at least one rotor nozzle on the rotor whereby oil exiting in use through said at least one nozzle causes rotation of said rotor about said rotation axis, and a rotatable impeller positioned below the rotor to exert pressure on the oil in said cleaner,

a vacuum dehydration unit connected to said centrifugal cleaner for receiving oil from said centrifugal cleaner, said dehydration unit comprising a vacuum chamber, and means for connecting said vacuum chamber to a vacuum source for removal of moisture from oil in said vacuum chamber, a vacuum chamber oil outlet,

a second pump connected to said vacuum chamber oil outlet for pumping oil from said vacuum chamber,

~~a holding tank,~~

~~an oil outlet,~~ and

first connecting means for selectively connecting said vacuum chamber oil outlet either to ~~said~~ an outlet for ~~supply of~~ cleaned oil ~~to said outlet~~ or to said holding tank ~~for supply of oil to said holding tank~~ for recirculation of cleaned oil back through said apparatus.

21. (previously presented) Apparatus as claimed in claim 20 and including second connecting means for selectively connecting said first pump to either said inlet or said holding tank.

22. (previously presented) Apparatus as claimed in claim 21 wherein said first and second connecting means comprise selectively actuable outlet and inlet valve valves respectively.

23. (canceled)

24. (previously presented) Apparatus as claimed in claim 20 wherein said centrifugal cleaner comprises a base, a hollow spindle extending from said base along said axis of rotation and connected to said cleaner inlet for supply of oil to the interior of

said housing, said rotor being mounted on said spindle for rotation relative to said base, and said housing being mounted on the base.

25. (canceled)

26. (currently amended) Apparatus as claimed in claim 20 wherein said impeller ~~comprise~~ comprises a central hub mounted for rotation about said axis of rotation of said rotor, said hub having at least one blade extending therefrom.

27. (previously presented) Apparatus as claimed in claim 20 wherein said impeller is attached to said rotor for rotation therewith.

28. (previously presented) Apparatus as claimed in claim 20 wherein said impeller is independent of said rotor.

29. (currently amended) Apparatus as claimed ~~claims~~ in claim 20 wherein said centrifugal cleaner comprises a base having a drain sump formed therein, said rotor having an interior and an exterior and wherein said axis of rotation comprises a substantially vertical axis for rotation of said rotor thereabout, said at least one rotor nozzle being in a lower portion of the rotor, the rotor having side walls arranged to retain solid contaminants contained in the oil which are forced outwardly by rapid rotation of the rotor due to reaction to ejection of the fluid to said drain sump through the at least

one rotor nozzle, said housing mounted on the base, a fluid inlet passage arranged to supply fluid at an elevated pressure to the interior of the rotor by way of the rotation axis, and at least one fluid drain passage in the base to receive fluid from the drain sump ~~and an impeller positioned below the rotor adjacent the base to exert pressure on the fluid~~.

30. (currently amended) Apparatus as ~~claims~~ claimed in claim 20 wherein said vacuum chamber has a base, an inlet in an upper portion of the vacuum chamber for fluid entry, and a water trap connected to said chamber for collecting water from said chamber.

31. (previously presented) Apparatus as claimed in claim 30 and including an oil discharge passage in a lower portion of the vacuum chamber and extending a distance above the base of the chamber to maintain a depth of oil in said vacuum chamber.

32. (canceled)

33. (previously presented) Apparatus as claimed in claim 20 wherein said centrifugal cleaner includes an outlet, said outlet extending into said vacuum chamber.

34. (previously presented) Apparatus as claimed in claim 30 wherein said vacuum chamber includes at least one condensation tray in an upper portion of said

chamber to increase the surface area of oil exposed to the vacuum, said condensation tray being inclined downwardly towards the connection of said vacuum source to said vacuum chamber.

35-36. (canceled)

37. (previously presented) Apparatus as claimed in claim 20 and including a mobile chassis and wherein said heating unit, centrifugal cleaner, vacuum dehydration unit, and holding tank are supported on said chassis.

38. (previously presented) Apparatus for cleaning oil, said apparatus comprising:

a heating unit for heating oil,

a centrifugal cleaner connected to said heating unit for receiving heated oil from said heating unit, said centrifugal cleaner having a rotor mounted for rotation about a rotation axis, a housing enclosing the rotor, a cleaner inlet for receiving oil from said heating unit, and at least one rotor nozzle on said rotor, said rotor nozzle upon exit of oil therefrom causing rotation of said rotor about said rotation axis, and a rotatable impeller positioned below the rotor to exert pressure on the oil in said cleaner,

a vacuum dehydration unit connected to said centrifugal cleaner for receiving oil from said centrifugal cleaner,

an oil holding tank,

an inlet for oil to be cleaned,

a first control valve selectively actuable to connect said heating unit to one of said inlet or said holding tank whereby oil to be cleaned can be supplied from said inlet to said heating unit or from said holding unit to said heating unit,

an outlet for cleaned oil,

a second control valve selectively actuable to connect said dehydration unit to one of said outlet or said holding tank to supply oil to said outlet or said holding tank respectively, and

one or more pumps for conveying oil from said inlet or holding tank through said heating unit, said centrifugal cleaner and said dehydration unit to said outlet or back to said holding tank.

39. (canceled)

40. (currently amended) Apparatus for cleaning contaminated oil, said apparatus comprising:

an inlet connectable to a source of oil to be cleaned,

a holding tank for oil,

a heater for heating said oil,

a first pump for pumping oil through said heater,

a centrifugal cleaner having a rotor mounted for rotation about a rotation axis, a housing enclosing the rotor, and a cleaner inlet for receiving oil from said heater,

an impeller attached to said rotor for rotation therewith to exert, when rotated with said rotor, pressure on oil in the cleaner,

a vacuum dehydration unit connected to said centrifugal cleaner for receiving oil from said centrifugal cleaner, said dehydration unit comprising a vacuum chamber, and means for connecting said vacuum chamber to a vacuum source for removal of moisture from said vacuum chamber,

a second pump connected to said vacuum chamber,

~~a holding tank,~~

an oil outlet,

a selectively actuable outlet valve connected to said second pump and connectable to said holding tank or said oil outlet for pumping of oil to said oil outlet or said holding tank respectively, and

a selectively actuable inlet valve connected to said first pump and connectable to said holding tank or said inlet for pumping oil to be cleaned from said holding tank or said inlet respectively.

41. (previously presented) Apparatus as claimed in claim 40 wherein said centrifugal cleaner comprises a base, a hollow spindle extending from said base along said axis of rotation and connected to said cleaner inlet for supply of oil to the interior of said cleaner, said rotor being mounted on said spindle for rotation relative to said base, said housing being mounted on the base and enclosing the rotor, and at least one rotor

nozzle on the rotor, wherein oil exiting in use through said at least one nozzle causes rotation of said rotor about said rotation axis.

42. (currently amended) Apparatus as claimed in claim 41 wherein said rotor ~~the rotor~~ has side walls adapted to retain solid contaminants contained in the oil which are forced outwardly by rotation of the rotor.

43. (previously presented) Apparatus as claimed in claim 42 wherein said vacuum chamber least one condensation tray in an upper portion of said chamber to increase the surface area of oil exposed to the vacuum, said condensation tray being inclined downwardly towards the connection of said vacuum source to said vacuum chamber.

44. (previously presented) Apparatus as claimed in claim 43 and including and a water trap connected to said chamber for collecting water condensing within said chamber.

* * *

5. The above changes were made merely to clarify the wording of the claims, namely to delete duplicate claim elements and correct minor typographical errors. These changes were not made in view of any prior art or patentability issues and are not deemed to alter the scope of the claims.

6. The following is an Examiner's Statement of Reasons for Allowance:

The claims are deemed allowable over the prior art of record in view of Applicant's remarks filed 24 JAN 2008. The replacement drawing sheet filed 31 JAN 2008 is approved.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley in Art Unit 1797 whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri.. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles E. Cooley/

Charles E. Cooley
Primary Examiner
Art Unit 1797

16 April 2008